

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OKLAHOMA

FILED

FEB 13 2004

Phil Lombardi, Clerk
U.S. DISTRICT COURT

THE CITY OF TULSA,
THE TULSA METROPOLITAN
UTILITY AUTHORITY,

Plaintiffs,

v.

Case No. 01-CV-0900-EA (C)

1. TYSON FOODS, INC.,
2. COBB-VANTRESS, INC.,
3. PETERSON FARMS, INC.,
4. SIMMONS FOODS, INC.,
5. CARGILL, INC.,
6. GEORGE'S, INC.,
7. CITY OF DECATUR,
ARKANSAS,

Defendants.

ORDER

Before the Court is the Emergency Application for Order Approving Phosphorous Index filed by defendants Tyson Foods, Inc., Cobb-Vantress, Inc., Peterson Farms, Inc., Simmons Foods, Inc., Cargill, Inc., George's Inc. ("Poultry Defendants") (Dkt. #491-2).

The parties entered into a Settlement Agreement to resolve this case without further litigation and to "ensure that nutrient management protocols are used in the Watershed to reduce the risk of harm to Plaintiffs' Water Supply due to the Land Application of Nutrients and The City of Decatur's WWTP discharge, while at the same time recognizing the right of the Poultry Defendants and their Growers to continue to conduct poultry operations in the Watershed within such protocols and the importance of clean lakes, safe drinking water and a viable poultry industry to the economies of Northeast Oklahoma and Northwest Arkansas." Settlement Agreement ¶C1. To effect this intent,

a team of scientists consisting of equal number of representatives from Oklahoma State University and University of Arkansas, the "PI Team," was charged with the responsibility of developing and determining a "new phosphorous risk-based index" ("PI") . . . "to govern the terms and conditions under which any Nutrients may be land applied in the Watershed." Settlement Agreement ¶D1. The Settlement Agreement requires that the PI "achieve the least amount of total phosphorus loading reasonably attainable from each Application Site to the Water Supply from all sources of phosphorus on each such Application Site while still meeting the agronomic requirements for the growth of grasses, crops and other desirable plant life." Settlement Agreement ¶D2. The final PI must have unanimous agreement of all PI Team members before its submission to the Court for approval. Settlement Agreement ¶D3.

As the PI Team was unable to reach agreement on a final PI, under the terms of the Settlement Agreement the Court is to "determine an appropriate PI for use in the Watershed." Settlement Agreement ¶D6. Poultry Defendants submitted a proposed PI entitled "ESPI 1.0" developed by representatives of the University of Arkansas (Dkt. #491, Ex. B); plaintiffs submitted a proposed PI entitled "PPM Calculator" developed by representatives of Oklahoma State University (Dkt. #491, Ex. C). To assist the Court in its determination of an appropriate PI, an evidentiary hearing was held on February 9, 2004 regarding the parties' separate PI proposals. The PI determined by Court will remain in effect unless and until the parties agree to modify it or the Court otherwise orders. Settlement Agreement ¶D7.

Having considered the parties' PI proposals and the testimony and evidence at the February 9 hearing, the Court finds that neither proposal complies completely with the Settlement Agreement. ESPI 1.0 does not fully account for total P loading, and does not represent the "least amount of total

P loading reasonably attainable . . . from all sources of P.” The PPM Calculator requires that the parties or the Court set a P allocation or a specific endpoint, which is not a requirement of the Settlement Agreement, and without an endpoint is limited to agronomic needs for phosphorus only.

THEREFORE, the Court finds as follows:

1. In lieu of determining a final, “appropriate” PI at this time, the Court establishes a trial implementation period, nominally until December 31, 2004. During the trial period, the PI to be utilized to develop Nutrient Management Plans under the Settlement Agreement shall be based on ESPI 1.0 as modified herein.

2. ESPI 1.0 is modified as follows for utilization during the trial period:

a. Table 2, ESPI Interpretation and Nutrient Application Recommendations, is modified to read:

<u>P Index Scale</u>	<u>Site Interpretations and Recommendations</u>
<33	Low potential for P movement from site. Apply nutrients based on ESPI 1.0 calculation. Caution against long-term P buildup.
34 to 55	Medium potential for P movement from site. Evaluate the Index and determine any areas that could cause long term concerns. Add conservation practices or reduce P application to maintain the risk at 55 or below. Apply nutrients based on ESPI calculation.
56 to 100	High potential for P movement from site. Evaluate the Index and determine elevation cause. Add appropriate conservation

practices and/or reduce P application. The immediate planning target is a PI value of 55 or less. If this target cannot be achieved with realistic conservation practices and/or reduced P rates in the short term, then a progressive plan needs to be developed with a long-term goal of a PI less than 55. Apply nutrients to meet crop phosphorous needs according to NRCS Nutrient Management Standard 590. *Application rates based on crop phosphorous needs are generally less than 1 ton/acre. Since accurate, uniform applications at these low rates are rarely obtainable with conventional equipment, no litter (nutrient) application is recommended.*

>100 Very High potential for P movement from site. No litter (nutrient) application. Add conservation practices to decrease this value to below 100 in the short term and develop a progressive conservation plan that would reduce the PI to a lower risk category with a long-term goal of a PI less than 55.

- b. Nutrients, as defined in the Settlement Agreement, shall not be applied to any application site having a Soil Test Phosphorous (STP) level, as determined by the Mehlich-III extractant method, of 300 mg/kg (milligrams per kilogram) or greater.

- c. Soil samples for analysis of STP shall be collected from the depth of 0" to 4" (zero inches to four inches in depth), or the actual depth of soil if less than four inches.
- d. Litter samples for determination of soluble phosphorous shall be analyzed following the method found on page 74 of "Methods of Phosphorous Analysis for Soils, Sediments, Residuals, and Waters", SERA-IEG 17 Southern Cooperative Series Bulletin No. 396.
- e. Where the PI refers to best management practices (BMP's), eligible BMP's must adhere to NRCS Conservation Practice Standards For Water Quality.
- f. Other NRCS recommended limitations on land application shall be applicable to each Application Site.

3. The Court hereby encourages an annual goal that the total amount of litter that may be land applied annually in the Eucha/Spavinaw Watershed from all sources covered by the Moratorium not exceed two-thirds of the amount of litter produced annually within the Eucha/Spavinaw Watershed by the Poultry Defendants and their Contract Growers. The Special Master shall determine this approximate goal in tons based on information available to him regarding historical and projected litter production in the Watershed and shall notify the Parties and the Court of this goal within 30 days. Thereafter as NMP's are written, the Special Master shall maintain a cumulative record of the amounts of litter allowed to be applied within the Watershed. When the cumulative amount reaches seventy-five per cent (75%) of the determined goal for a given year, the Special Master shall notify the Parties and the Executive Director of the Non-profit Organization. The Special Master and the Executive Director shall as soon thereafter as possible advise the Parties

of the projected remaining amount of litter sought to be land applied in the Watershed in comparison to the expected volume of litter for which there are funded mechanisms for transport, other commitments to transport litter out of the Watershed, or other programs to convert litter to alternative products for export. If the Special Master determines that the amount of litter remaining to be land applied with the Watershed is likely to exceed the annual goal, he shall notify the Parties. The Executive Director, together with the Poultry Defendants and any other entities, shall make additional reasonable attempts to secure transport of poultry litter out of the Watershed so as not to exceed the annual goal.

4. The Special Master and the Watershed Management Team shall run both the modified ESPI 1.0 and the PPM Calculator for each application site in addition to any methods utilized by applicable state regulations. Land Application of Nutrients shall be based on the modified ESPI 1.0, but also limited by other applicable regulations where those regulations are more stringent. The results of PPM calculations shall be reported in each NMP for comparative purposes and subsequent study by the Parties and the Court.

5. The University of Arkansas will further adjust the ESPI 1.0 to include procedures that will identify application sites which are approaching the lower threshold value of the High potential risk category of the P Index Scale, identify the list of factors which contribute the most to the ESPI 1.0 value and provide a list of remedial actions that could be reasonably implemented to the lower the ESPI value in the future. NMP's shall then subsequently be developed for these application sites which would prevent the field from reaching the High potential category and reduce the ESPI value where feasible.


6. The University of Arkansas and the Oklahoma State University PI Team members and their respective institutions are requested by the Court to continue to collaborate on:

- a. Research and field-study programs within the Eucha/Spavinaw Watershed to monitor edge-of-field phosphorous losses related to litter application rates, soil characteristics, landscape features, conservation practices, and ESPI 1.0 and PPM Calculator values;
- b. Conceptual procedures to better estimate the expected edge-of-field phosphorous loss and risk of phosphorous loading from application sites to the water supply associated with ESPI 1.0 and PPM Calculator values;
- c. To utilize the resulting empirical data to further refine, calibrate and validate the OSU predictive model; and
- d. Development of a joint quantitative PI in collaboration with the Special Master.

7. Within six months, the University of Arkansas and Oklahoma State University will report to the Court through the Special Master on progress to obtain funding, initiate significant phosphorous loss monitoring contingent upon availability of funding, and a revised joint Scope of Work designed to meet the conditions and requirements of the Settlement Agreement and this Order.

8. It is the Court's intent to implement, if possible, the joint quantitative PI (§ 6d. supra) no later than January 2005. If no joint quantitative PI is developed by January 2005, the Court will determine an appropriate PI based on the results of the trial period.

IT IS SO ORDERED this 13th day of February, 2004.


CLAIRE V. EAGAN
UNITED STATES DISTRICT JUDGE